

AMENDMENTS TO THE CLAIMS

Claims 1-58 (Previously Cancelled Without Prejudice or Disclaimer)

Claims 59-71 (Previously Cancelled Without Prejudice or Disclaimer)

Claim 72 (Previously Cancelled Without Prejudice or Disclaimer)

73. (Currently Amended) An optical reading device comprising:
an optical and image sensor assembly including
an image sensor subassembly including an image sensor mounted on a
substantially rigid planar member;
an optical subassembly, said optical subassembly including an optical element
disposed on a substantially rigid member;
a planar solderable surface formed on each of said optical subassembly and said
substantially rigid planar member defining a pair of solder receiving interfaces;
solder material for bonding said subassemblies disposed between said solder-
receiving interfaces; and
a housing, said optical and image sensor assembly being disposed in said
housing.

74. (Previously Presented) The device of claim 73, wherein said housing partially
defines a feed path and wherein said device is a document reading device, for reading
indicia from documents transported along said feed path.

75. (Previously Presented) The device of claim 73, wherein said housing includes a
handle, and wherein said device is a hand held optical reader.

Claims 76-79 (Cancelled Without Prejudice or Disclaimer)

Claims 80-108 (Previously Cancelled Without Prejudice or Disclaimer)

109. (Previously Presented) The device of claim 73, wherein said substantially rigid planar member includes a hole, wherein formed about said hole is metallic solder receiving material for receipt of solder securing said optical subassembly relative to said image sensor subassembly.

110. (Previously Presented) The device of claim 109, wherein said hole having metallic solder receiving material is a plated through hole.

111. (Currently Amended) An imaging device comprising:

an image sensor subassembly including an image sensor mounted on a printed circuit board;

a substantially rigid optical subassembly, said optical subassembly including an optical element disposed on a substantially rigid member;

wherein said optical subassembly includes a pin forming a solder receiving surface, and wherein said printed circuit board includes a hole receiving said pin, and wherein formed about said hole is a metallic solder receiving surface; and

solder material for bonding said subassemblies disposed between said pin and said metallic solder receiving surface so that said image sensor subassembly and said optical subassembly are fixedly adhered to one another.

112. (Previously Presented) The imaging device of claim 111, wherein said printed circuit board includes a first planar surface opposing said image sensor subassembly, and an opposite side second planar surface, and wherein said metallic solder receiving surface partially extends over said second planar surface.

113. (Previously Presented) The imaging device of claim 111, wherein said printed circuit board includes a first planar surface opposing said image sensor subassembly, and an opposite side second planar surface, and wherein said metallic solder receiving surface partially extends over said first planar surface and said second planar surface.

114. (Previously Presented) The imaging device of claim 111, wherein said metallic solder receiving surface is plated through said hole.

115. (Previously Presented) The device of claim 111, further including a housing encapsulating said device, said device partially defining a feed path.

116. (Previously Presented) The device of claim 111, further including a housing encapsulating said device, said housing including a handle.

117. (Previously Presented) The device of claim 111, wherein said at least one solderable surface is made in an irregular configuration having an increased surface area per unit three dimensional space relative to that of a smooth surface.

118. (Previously Presented) The device of claim 111, wherein said at least one solderable surface is made in the configuration of a hole.

119. (Previously Presented) The device of claim 111, wherein said at least one solderable surface is in the configuration of a pin.

120. (Previously Presented) The device of claim 111, wherein said at least one solderable surface is provided by a threaded screw.

121. (Previously Presented) An imaging device comprising:
an image sensor subassembly including an image sensor mounted on a printed circuit board;
a substantially rigid optical subassembly, said optical subassembly including an optical element disposed on a substantially rigid member;
at least one solderable surface formed on either of said printed circuit board or said optical subassembly defining at least one solder receiving interface between said printed circuit board and said optical subassembly;

solder material for bonding said subassemblies disposed at said at least one solder-receiving interface;

wherein said image sensor subassembly and said optical subassembly are configured to be secured together by an assembly process;

wherein said image sensor subassembly and said optical subassembly are configured to be moved relative to one another during said assembly process, until an alignment is established between said image sensor and said optical element;

wherein said image sensor subassembly and said optical subassembly are further configured to be fixedly secured together in a position at which said alignment is achieved; and

wherein said alignment is indicated by an electrical signal having a pre-defined characteristic, said electrical signal generated by said image sensor.

122. (Previously Presented) The device of claim 121, further including a housing encapsulating said device, said device partially defining a feed path.

123. (Previously Presented) The device of claim 121, further including a housing encapsulating said device, said housing including a handle.

124. (Previously Presented) The device of claim 121, wherein said at least one solderable surface is made in an irregular configuration having an increased surface area per unit three dimensional space relative to that of a smooth surface.

125. (Previously Presented) The device of claim 121, wherein said at least one solderable surface is made in the configuration of a hole.

126. (Previously Presented) The device of claim 121, wherein said at least one solderable surface is in the configuration of a pin.

127. (Previously Presented) The device of claim 121, wherein said at least one solderable surface is provided by a threaded screw.

128. (New) An optical reading device comprising:
an optical and image sensor assembly including
an image sensor subassembly including an image sensor mounted on a substantially rigid planar member;
an optical subassembly, said optical subassembly including an optical element disposed on a substantially rigid member;
a solderable surface formed on each of said optical subassembly and said substantially rigid planar member defining a pair of solder receiving interfaces, said image sensor subassembly and said optical subassembly being fixedly adhered to one another;
solder material for bonding said subassemblies disposed between said solder-receiving interfaces; and
a housing, said optical and image sensor assembly being disposed in said housing.
129. (New) The device of claim 128, wherein said housing partially defines a feed path and wherein said device is a document reading device, for reading indicia from documents transported along said feed path.
130. (New) The device of claim 128, wherein said housing includes a handle, and wherein said device is a hand held optical reader.
131. (New) The device of claim 128, wherein said solderable surface is made in an irregular configuration having an increased surface area per unit three dimensional space relative to that of a smooth surface.
132. (New) The device of claim 128, wherein said solderable surface is made in the configuration of a hole.

133. (New) The device of claim 128, wherein said solderable surface is in the configuration of a pin.

134. (New) The device of claim 128, wherein said solderable surface is provided by a threaded screw.

135. (New) The device of claim 128, wherein said substantially rigid planar member includes a hole, wherein formed about said hole is metallic solder receiving material for receipt of solder securing said optical subassembly relative to said image sensor subassembly.

136. (New) The device of claim 135, wherein said hole having metallic solder receiving material is a plated through hole.